**3GPP TSG RAN WG1 #100bis-e R1-20xxxxx**

**e-Meeting, 20th – 30th April, 2020**

**Agenda item:** 7.2.11

**Source:** Moderator (NTT DOCOMO, INC.)

**Title:** Summary on email discussion [100b-e-NR-UEFeatures-Remaining] NR\_CLI\_RIM

**Document for:** Discussion and Decision

1. Introduction

This contribution summarizes the following email discussion in AI 7.2.11 regarding Rel-16 NR UE features.

[100b-e-NR-UEFeatures-Remaining] Email discussion/approval of remaining issues (especially the one identified as low priority items in FL’s summaries) starting no earlier than 4/30 till next meeting – Hiroki (DCM)/Ralf (ATT)

Companies are encouraged to check further updates for UE features list based on R1-2003073 shown below and provide feedback if any. Please note that the target of this email discussion is to reflect agreeable updates rather than solving any controversial discussion point. If there is any controversial discussion point, it should be discussed in the next RAN1 meeting.

1. NR\_CLI\_RIM

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| **Features** | **Index** | **Feature group** | **Components** | **Prerequisite feature groups** | **Need for the gNB to know if the feature is supported** | **Applicable to the capability signalling exchange between UEs (V2X WI only)”.** | **Consequence if the feature is not supported by the UE** | **Type**  **( 1) Per UE or 2) Per Band or 3) Per BC or 4) Per FS or 5) Per FSPC)** | **Need of FDD/TDD differentiation** | **Need of FR1/FR2 differentiation** | **Capability interpretation for mixture of FDD/TDD and/or FR1/FR2** | **Note** | **Mandatory/Optional** |
| 17. NR\_CLI\_RIM | 17-1 | CLI-RSSI measurement | 1. Support CLI-RSSI measurement. The max number of resources across all CCs configured to measure RSSI simultaneously shall not exceed 64.  2. Maximum number of measurement resources configured for CLI-RSSI measurement |  | Yes | N/A |  | Per UE | No (TDD only) | Yes | N/A | Candidate values for component 2 are {8, 16, 32, 64}.  FFS: whether or how to handle licensed/unlicensed differentiation | Optional with capability signalling |
| 17. NR\_CLI\_RIM | 17-2 | SRS-RSRP measurement | 1. Support SRS-RSRP measurement. The max number of SRS resources across all CCs configured to measure SRS-RSRP simultaneously shall not exceed 32.  2. Maximum number of measurement resources configured for SRS-RSRP measurement  3. Maximum number of measurement resources configured for SRS-RSRP measurement within a slot |  | Yes | N/A |  | Per UE | No (TDD only) | Yes | N/A | Candidate values for component 2 are {4, 8, 16, 32}.  Candidate values for component 3 are {2, 4, 8}.  FFS: whether or how to handle licensed/unlicensed differentiation | Optional with capability signalling |
| 17. NR\_CLI\_RIM I | 17-3 | Simultaneous reception of DL signals/channels and CLI-RSSI measurement resource | Support simultaneous reception of DL signals/channels and CLI-RSSI measurement resource | 17-1 | Yes | N/A |  | Per UE | No (TDD only) | Yes | N/A | UE shall prioritize CLI-RSSI measurement when simultaneous reception of DL signals/channels and CLI-RSSI measurement resource is not supported. | Optional with capability signalling |
| 17. NR\_CLI\_RIM I | 17-4 | Simultaneous reception of DL signals/channels and SRS-RSRP measurement resource | Support simultaneous reception of DL signals/channels and SRS-RSRP measurement resource | 17-2 | Yes | N/A |  | Per UE | No (TDD only) | Yes | N/A | UE shall prioritize SRS-RSRP measurement when simultaneous reception of DL signals/channels and SRS-RSRP measurement resource is not supported. | Optional with capability signalling |

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| Company | Comment |
| Nokia, NSB | We support the proposals in the table above.  Regarding to FFS in 17-1/2, the features have been specified without consideration of unlicensed operation. More discussion is needed on the need for licensed/unlicensed differentiation. |
| Intel | We support the UE features listed above. However, the word “simultaneously” should be removed from 17-1 component 1 and 17-2 component 1 to avoid confusion.  The constraint on maximum number of CLI measurement resources is not for the resources to be measured **simultaneously** by a UE. |
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